

WHAT IS CLAIMED IS:

1. An electrical assembly, comprising:

an electrical convoluted tubing with an outer surface having a plurality of generally parallel, annular convolutions defining respective grooves therebetween, each said groove having a width;

5 at least one electrical conductor within said tubing; and

an electrical tie around said tubing, including:

a head; and

10 an elongate strap having opposing sides and an end, said end being attached to said head, at least one said side having at least one longitudinally extending rib, each said rib having a width which is less than said groove width.

2. The electrical assembly of claim 1, wherein said at least one rib comprises a plurality of ribs, said plurality of ribs being substantially parallel with each other.

3. The electrical assembly of claim 2, wherein adjacent ones of said plurality of ribs have a spacing therebetween corresponding to a spacing between said convolutions.

4. The electrical assembly of claim 3 wherein adjacent ones of said plurality of ribs having a spacing therebetween corresponding to a spacing between adjacent said convolutions.

5. The electrical assembly of claim 1, said head including a locking slot for receiving said strap therein, said locking slot including opposing walls, each said wall including at least one locking tooth.

6. The electrical assembly of claim 1, said head including a hinge section allowing hinged movement of said head in a direction transverse to a longitudinal extension of said strap.

7. The electrical assembly of claim 1, said head including a mounting through-hole.

8. An electrical tie, comprising:

a head; and

an elongate strap having opposing sides and an end, said end being attached to said head, at least one said side having at least two longitudinally extending ribs.

9. The cable tie of claim 8, each said rib extending a substantial portion of a length of said corresponding side.

10. The cable tie of claim 8, said at least one rib comprising a plurality of ribs on at least one side, said plurality of ribs being substantially parallel with each other.

11. The cable tie of claim 8, said at least one rib comprising two ribs on one said side and three ribs on an other said side.

12. The cable tie of claim 10, said three ribs on said other side including serrations.

13. An electrical tie, comprising:

an elongate strap having opposing sides and an end, at least one said side having a plurality of serrations; and

a head attached to said end, said head including a locking slot for receiving said strap

5 therein, said locking slot including opposing walls, each said wall including at least one locking tooth.

14. The electrical tie of claim 13, wherein said serrations include one of projections and recesses.

15. The electrical tie of claim 14, wherein at least one said side has at least one longitudinally extending rib, at least one said rib including serrations in said rib.

16. The electrical tie of claim 13, each said wall including a plurality of locking teeth.

17. The electrical tie of claim 16, said plurality of locking teeth having a ramped, cantilever beam construction.

18. An electrical tie, comprising:

an elongate strap having a longitudinal extension, opposing sides and an end, said end being attached to said head, at least one said side including serrations; and

a head attached to said end, said head including a locking slot for receiving said strap

5 therein and interconnecting with said serrations, and a hinge section allowing hinged movement of said head in a direction transverse to said longitudinal extension.

19. The electrical tie of claim 18, said hinged section comprising a thinned section.

20. The electrical tie of claim 18, said hinge section allowing hinged movement of said head in a direction generally perpendicular to said longitudinal extension

21. An electrical tie, comprising:

an elongate strap having opposing sides and an end, at least one said side including serrations; and

a head attached to said end, said head including a locking slot for receiving said strap

5 therein and interconnecting with said serrations, and a mounting through-hole.

22. The electrical tie of claim 21, said mounting through-hole extending in a direction generally coincident with said locking slot.

23. The electrical tie of claim 21, said mounting through-hole having a generally cylindrical shape.

24. The electrical tie of claim 21, said elongate strap having a longitudinal extension, said head including a hinge section allowing hinged movement of said head in a direction transverse to said longitudinal extension.